

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Previously Amended) A rotary switch mounted above and below a panel, comprising:
 - a sealing member disposed between a portion of the switch and an underside of the panel;
 - a detent sub-assembly located entirely above the panel; and
 - a knob that substantially covers the detent sub-assembly wherein the detent sub-assembly is enclosed and operates independent of the knob and further wherein only a bushing and shaft extend through the panel.
2. (Previously Presented) The rotary switch of claim 1, wherein operation of the detent sub-assembly is not altered by removal of the knob.
3. (Previously Presented) The rotary switch of claim 1, further comprising a spring and at least one ball that cooperates with a detent in the sub-assembly to provide discrete rotational positioning of the knob.
4. (Previously Presented) The rotary switch of claim 3, wherein the balls do not extend into the panel.
5. (Previously Presented) The rotary switch of claim 3, further comprising a shaft that extends through the panel and the detent sub-assembly and is coupled to the knob.
6. (Previously Presented) The rotary switch of claim 5, wherein the shaft is further coupled to an electrical contact that contacts a printed circuit board below the panel.
7. (Previously Presented) The rotary switch of claim 6, wherein the detent sub-assembly further comprises a detent sprocket having cylindrical lobes that cooperate with a spring, the shaft, and a rotor to set a switch position.
8. (Previously Presented) The rotary switch of claim 7, wherein the switch position defines an electrical circuit.

9. (Previously Amended) A rotary switch for mounting on an underside of a panel, the rotary switch having a fully enclosed detent sub-assembly on a user's side of the panel, and a sealing member disposed between the sub-assembly and an underside of the panel.

10. (Previously Amended) A method of selecting an electrical circuit using a panel mounted rotary switch, comprising:

- providing a shaft that cooperates with an independent detent sub-assembly located entirely on a user's side of the panel, wherein the shaft is coupled to an electrical connection on an underside of the panel and further wherein the detent sub-assembly is completely on one side of the panel and the rotary switch is located on the underside of the panel and not within the detent sub-assembly;
- a sealing member disposed between a portion of the switch and an underside of the panel;
- and
- selecting the circuit by rotating the shaft thereby causing the electrical connection to contact a printed circuit board in a configuration approximating the circuit.

11. (Previously Amended) A panel mounted rotary switch, comprising:

- an independent detent sub-assembly located on a user's side of a panel;
- a sealing member disposed between a portion of the switch and an underside of the panel;
- a knob that substantially covers the detent sub-assembly; and
- a shaft that cooperates with the detent sub-assembly to manipulate an electrical connection on an underside of the panel.

12. (Previously Presented) The rotary switch of claim 1, wherein the detent sub-assembly has a single spring.